

SEQUENCE LISTING

<110> Walke, D. Wade
Wilganowski, Nathaniel L.
Friddle, Carl Johan

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Glu	Asn	Pro	Tyr	Ser	Thr	Leu	Trp	Ser	Phe	Leu	Ser	Trp	Arg	Arg	Lys	275	280	285
Leu	Leu	Ala	Gln	Lys	Tyr	His	Asp	Asn	Ala	Gln	Leu	Ile	Thr	Gly	Met	290	295	300
Ser	Phe	His	Gly	Thr	Thr	Ile	Gly	Leu	Ala	Pro	Leu	Met	Ala	Met	Cys	305	310	315
Ser	Val	Tyr	Gln	Ser	Gly	Gly	Val	Asn	Met	Asp	His	Ser	Glu	Asn	Ala	325	330	335
Ile	Gly	Val	Ala	Ala	Thr	Met	Ala	His	Glu	Met	Gly	His	Asn	Phe	Gly	340	345	350
Met	Thr	His	Asp	Ser	Ala	Asp	Cys	Cys	Ser	Ala	Ser	Ala	Ala	Asp	Gly	355	360	365
Gly	Cys	Ile	Met	Ala	Ala	Ala	Thr	Gly	His	Pro	Phe	Pro	Lys	Val	Phe	370	375	380
Asn	Gly	Cys	Asn	Arg	Arg	Glu	Leu	Asp	Arg	Tyr	Leu	Gln	Ser	Gly	Gly	385	390	395
Gly	Met	Cys	Leu	Ser	Asn	Met	Pro	Asp	Thr	Arg	Met	Leu	Tyr	Gly	Gly	405	410	415
Arg	Arg	Cys	Gly	Asn	Gly	Tyr	Leu	Glu	Asp	Gly	Glu	Glu	Cys	Asp	Cys	420	425	430
Gly	Glu	Glu	Glu	Glu	Cys	Asn	Asn	Pro	Cys	Cys	Asn	Ala	Ser	Asn	Cys	435	440	445
Thr	Leu	Arg	Pro	Gly	Ala	Glu	Cys	Ala	His	Gly	Ser	Cys	Cys	His	Gln	450	455	460
Cys	Lys	Leu	Leu	Ala	Pro	Gly	Thr	Leu	Cys	Arg	Glu	Gln	Ala	Arg	Gln	465	470	475
Cys	Asp	Leu	Pro	Glu	Phe	Cys	Thr	Gly	Lys	Ser	Pro	His	Cys	Pro	Thr	485	490	495
Asn	Phe	Tyr	Gln	Met	Asp	Gly	Thr	Pro	Cys	Glu	Gly	Gly	Gln	Ala	Tyr	500	505	510
Cys	Tyr	Asn	Gly	Met	Cys	Leu	Thr	Tyr	Gln	Glu	Gln	Cys	Gln	Gln	Leu	515	520	525
Trp	Gly	Pro	Gly	Ala	Arg	Pro	Ala	Pro	Asp	Leu	Cys	Phe	Glu	Lys	Val	530	535	540
Asn	Val	Ala	Gly	Asp	Thr	Phe	Gly	Asn	Cys	Gly	Lys	Asp	Met	Asn	Gly	545	550	555

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Cys	Gln	Ser	Ser	Glu	Ala	Arg	Pro	Leu	Glu	Ser	Asn	Ala	Val	Pro	Ile		
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Asp	Thr	Thr	Ile	Ile	Met	Asn	Gly	Arg	Gln	Ile	Gln	Cys	Arg	Gly	Thr		
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His	Val	Tyr	Arg	Gly	Pro	Glu	Glu	Glu	Gly	Asp	Met	Leu	Asp	Pro	Gly		
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Leu	Val	Met	Thr	Gly	Thr	Lys	Cys	Gly	Tyr	Asn	His	Ile	Cys	Phe	Glu		
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Gly	Gln	Cys	Arg	Asn	Thr	Ser	Phe	Phe	Glu	Thr	Glu	Gly	Cys	Gly	Lys		
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Lys	Cys	Asn	Gly	His	Gly	Val	Cys	Asn	Asn	Asn	Gln	Asn	Cys	His	Cys		
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Leu	Pro	Gly	Trp	Ala	Pro	Pro	Phe	Cys	Asn	Thr	Pro	Gly	His	Gly	Gly		
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Pro	Pro	Pro	Asp	Tyr	Leu	Arg	Gly	Gly	Ser	Pro	Pro	Ala	Pro	Leu	Pro		
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Thr	Glu	Leu	Pro	Glu	Gln	Lys	Pro	Arg	Ala	Lys	His	Ser	Cys	Phe	Leu		
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<211> 2868

<212> DNA

<213> homo sapiens

<400> 7

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<212> PRT

<213> homo sapiens

<400> 8

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Gly	Ser	Glu	Glu	Gly	Ser	Pro	Lys	Leu	Gln	His	Glu	Leu	Ile	Ile	Pro
		35					40					45			
Gln	Trp	Lys	Thr	Ser	Glu	Ser	Pro	Val	Arg	Glu	Lys	His	Pro	Leu	Lys
	50					55					60				
Ala	Glu	Leu	Arg	Val	Met	Ala	Glu	Gly	Arg	Glu	Leu	Ile	Leu	Asp	Leu
65					70					75					80
Glu	Lys	Asn	Glu	Gln	Leu	Phe	Ala	Pro	Ser	Tyr	Thr	Glu	Thr	His	Tyr
				85					90					95	
Thr	Ser	Ser	Gly	Asn	Pro	Gln	Thr	Thr	Thr	Arg	Lys	Leu	Glu	Asp	His
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Cys	Phe	Tyr	His	Gly	Thr	Val	Arg	Glu	Thr	Glu	Leu	Ser	Ser	Val	Thr
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Leu	Ser	Tyr	Val	Ile	Glu	Pro	Leu	Pro	Asp	Ser	Lys	Gly	Gln	His	Leu
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Ile	Tyr	Arg	Ser	Glu	His	Leu	Lys	Pro	Pro	Pro	Gly	Asn	Cys	Gly	Phe
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Glu	His	Ser	Lys	Pro	Thr	Thr	Arg	Asp	Trp	Ala	Leu	Gln	Phe	Thr	Gln
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Gln	Thr	Lys	Lys	Arg	Pro	Arg	Arg	Met	Lys	Arg	Glu	Asp	Leu	Asn	Ser
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Met	Lys	Tyr	Val	Glu	Leu	Tyr	Leu	Val	Ala	Asp	Tyr	Leu	Glu	Phe	Gln
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Ala	Asn	Tyr	Val	Asp	Lys	Phe	Tyr	Arg	Ser	Leu	Asn	Ile	Arg	Ile	Ala
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Leu	Val	Gly	Leu	Glu	Val	Trp	Thr	His	Gly	Asn	Met	Cys	Glu	Val	Ser
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Glu	Asn	Pro	Tyr	Ser	Thr	Leu	Trp	Ser	Phe	Leu	Ser	Trp	Arg	Arg	Lys
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Ser	Phe	His	Gly	Thr	Thr	Ile	Gly	Leu	Ala	Pro	Leu	Met	Ala	Met	Cys
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Ser	Val	Tyr	Gln	Ser	Gly	Gly	Val	Asn	Met	Asp	His	Ser	Glu	Asn	Ala
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Ile	Gly	Val	Ala	Ala	Thr	Met	Ala	His	Glu	Met	Gly	His	Asn	Phe	Gly
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Met	Thr	His	Asp	Ser	Ala	Asp	Cys	Cys	Ser	Ala	Ser	Ala	Ala	Asp	Gly
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Gly	Cys	Ile	Met	Ala	Ala	Ala	Thr	Gly	His	Pro	Phe	Pro	Lys	Val	Phe
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Asn	Gly	Cys	Asn	Arg	Arg	Glu	Leu	Asp	Arg	Tyr	Leu	Gln	Ser	Gly	Gly
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			405						410					415	
Arg	Arg	Cys	Gly	Asn	Gly	Tyr	Leu	Glu	Asp	Gly	Glu	Glu	Cys	Asp	Cys
			420					425					430		
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Cys Lys Leu Leu Ala Pro Gly Thr Leu Cys Arg Glu Gln Ala Arg Gln		
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Cys Asp Leu Pro Glu Phe Cys Thr Gly Lys Ser Pro His Cys Pro Thr		
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Asn Phe Tyr Gln Met Asp Gly Thr Pro Cys Glu Gly Gly Gln Ala Tyr		
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Cys Tyr Asn Gly Met Cys Leu Thr Tyr Gln Glu Gln Cys Gln Gln Leu		
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Trp Gly Pro Gly Ala Arg Pro Ala Pro Asp Leu Cys Phe Glu Lys Val		
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Asn Val Ala Gly Asp Thr Phe Gly Asn Cys Gly Lys Asp Met Asn Gly		
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Glu His Arg Lys Cys Asn Met Arg Asp Ala Lys Cys Gly Lys Ile Gln		
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Cys Gln Ser Ser Glu Ala Arg Pro Leu Glu Ser Asn Ala Val Pro Ile		
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Asp Thr Thr Ile Ile Met Asn Gly Arg Gln Ile Gln Cys Arg Gly Thr		
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His Val Tyr Arg Gly Pro Glu Glu Glu Gly Asp Met Leu Asp Pro Gly		
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Lys Cys Asn Gly His Gly Val Cys Asn Asn Asn Gln Asn Cys His Cys		
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Ser Ile Asp Ser Gly Pro Met Pro Pro Glu Ser Val Gly Pro Val Val		
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Ala Gly Val Leu Val Ala Ile Leu Val Leu Ala Val Leu Met Leu Met		
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Tyr Tyr Cys Cys Arg Gln Asn Asn Lys Leu Gly Gln Leu Lys Pro Ser		
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Ala Leu Pro Ser Lys Leu Arg Gln Gln Phe Ser Cys Pro Phe Arg Val		
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Ser Gln Asn Ser Gly Thr Gly His Ala Asn Pro Thr Phe Lys Leu Gln		
755	760	765
Thr Pro Gln Gly Lys Arg Lys Val Ile Asn Thr Pro Glu Ile Leu Arg		
770	775	780
Lys Pro Ser Gln Pro Pro Pro Arg Pro Pro Pro Asp Tyr Leu Arg Gly		
785	790	795
Gly Ser Pro Pro Ala Pro Leu Pro Ala His Leu Ser Arg Ala Ala Arg		
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Asn Ser Pro Gly Pro Gly Ser Gln Ile Glu Arg Thr Glu Ser Ser Arg		
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Arg Pro Pro Pro Ser Arg Pro Ile Pro Pro Ala Pro Asn Cys Ile Val		
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Ser Gln Asp Phe Ser Arg Pro Arg Pro Pro Gln Lys Ala Leu Pro Ala		
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Asn Pro Val Pro Gly Arg Ser Leu Pro Arg Pro Gly Gly Ala Ser		
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Pro Leu Arg Pro Pro Gly Ala Gly Pro Gln Gln Ser Arg Pro Leu Ala		

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Ala Leu Ala Pro Lys Val Ser Pro Arg Glu Ala Leu Lys Val Lys Ala					
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Gly Thr Arg Gly Leu Gln Gly Gly Arg Cys Arg Val Glu Lys Thr Lys					
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 <213> homo sapiens

<400> 9

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